

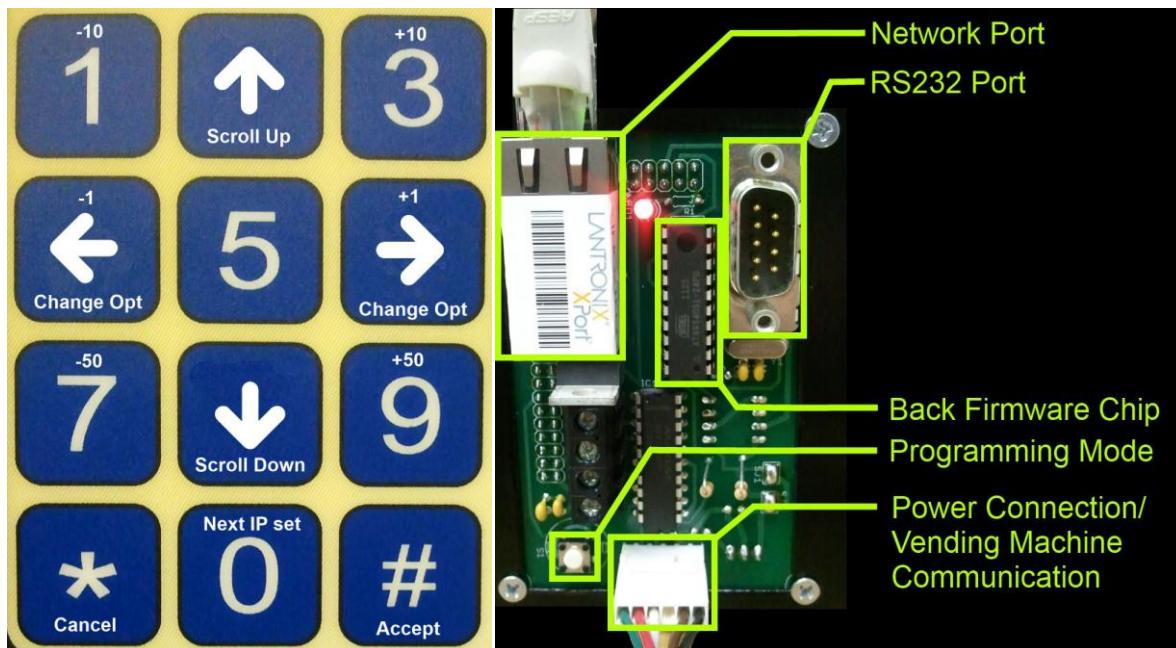
# VendIT

## Installation Guide v1.0

**Description:** This guide is designed to help with new VendIT installations and explains how to navigate the programming menu as well as providing a description of menu options available. In order to install a VendIT reader you will require some familiarization with the product before we get started. This guide utilizes both text and images to explain the process of installing a new VendIT Reader. Attached below are two important images that explain the key components on the VendIT Reader, as well as give a visual representation how the keypad will react in Programming Mode.

**Requirements:** There are many technologies involved when installing a VendIT system and thus there are a few requirements for equipment when installing a new VendIT Reader. This guide assumes that the Vending Machine equipped with a VendIT Reader and has an Internet connection hooked up to the VendIT Reader. It would also be beneficial to have a computer with Internet connectivity and the ability to browse to <http://www.vendit.ca>.

**Figure 1:**



## Verify Reader SN on the Vendit Website and VendIT Reader:

The first thing you will want to verify is that the correct VendIT Reader is setup on <http://www.vendit.ca>. Once you have logged into the website, click on the 'edit' button located beside the vending machine you are setting up.



System Information for: Andrews Testing Services

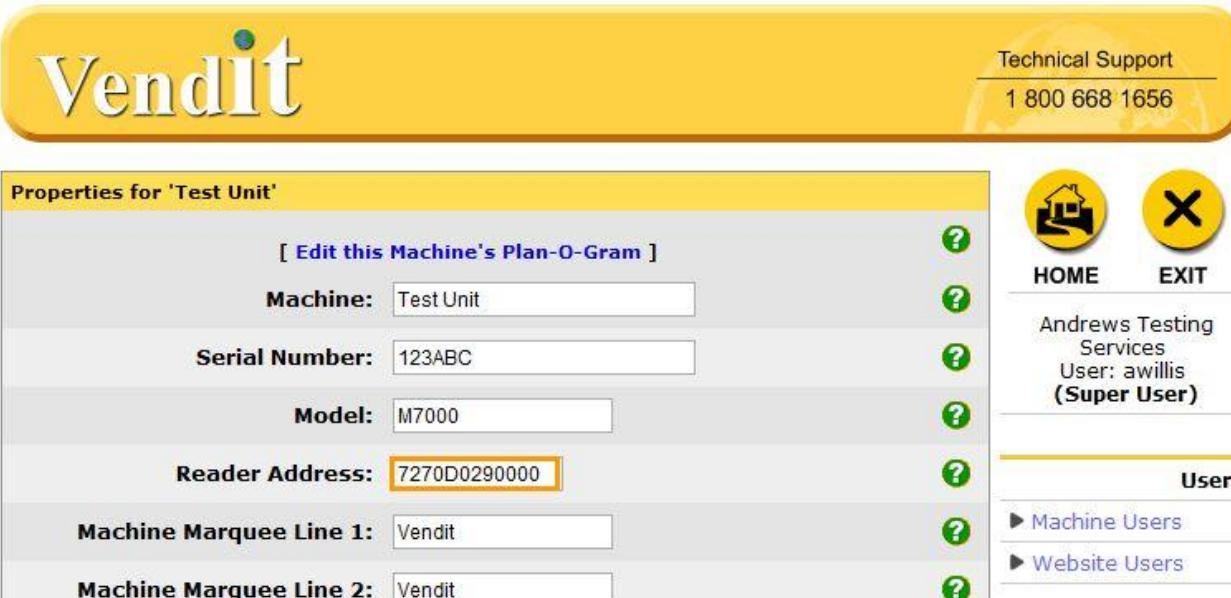
Logged in as: awillis

Show Deleted

Location: Lobby Area [More Info]

Machine	Inventory	Status	
Test Two	✗	✗	[Inventory] [Reports] [Transactions] [Edit]
Test Unit	✓	✗	[Inventory] [Reports] [Transactions] [Edit]

Once in the edit section, locate the section labeled 'Reader Address'. This is the serial number that corresponds to the serial number on the reader you are installing.



Properties for 'Test Unit'

[ Edit this Machine's Plan-O-Gram ]

Machine: Test Unit

Serial Number: 123ABC

Model: M7000

Reader Address: 7270D0290000

Machine Marquee Line 1: Vendit

Machine Marquee Line 2: Vendit

Technical Support  
1 800 668 1656

HOME  EXIT 

Andrews Testing Services  
User: awillis (Super User)

Users

▶ Machine Users  
▶ Website Users

To obtain the Serial Number of the VendIT Reader you will need to have the Reader powered to enter Programming Mode. To enter Programming Mode, locate the square white button on the back of the VendIT Reader (See Figure 1 on Page 1). Press the button once and there should be an audible 'beep' and the message on the front of the Reader will change. On the VendIT Reader LCD you should see 'Options Page 1' with 'SN:XXXXXXXXXXXX' (See Next Page). Verify that this Serial Number matches what is on the website.

## Reader Serial Number



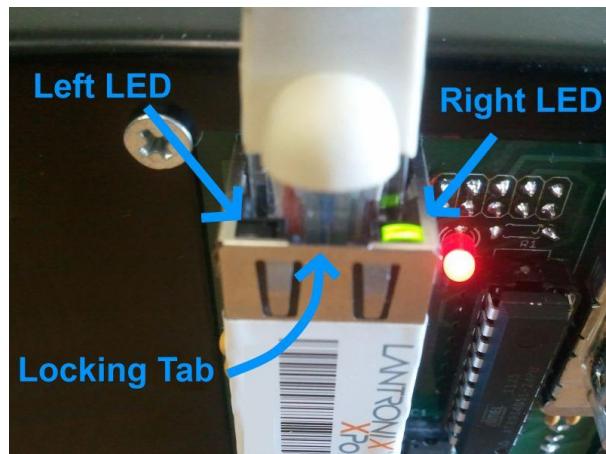
### Ensure network cable and MDB link are connected and there is no damage

After verifying the Serial Number of the VendIT Reader matches what is provided on the website, the next step is to ensure all of the connections in the machine are proper before moving on. There are two main connections for the VendIT Reader the MDB Communication/Power, and the Cat5e Network Cable. The MDB cable is located on the rear of the VendIT Reader in the lower middle position (See Figure 1 on Page 1) and the Network cable plugs into the top left. You will also want to ensure that the Cat5e network cable is securely plugged into the Network Port on the top of the VendIT Reader (Shown below). There should be an audible 'click' when the network connection is fully seated in the port. Also ensure that the other end of the network cable is plugged into a network enabled port to connect the Vending Machine to the end users network.

### Check for LED status on network Jack

After connecting the network cable, you should notice there are two LED lights, one on either side of the locking tab. These two lights indicate the status of the connection to the end users network. If no lights are lit

Activity LED		Link LED	
Left Side		Right Side	
Color	Meaning	Color	Meaning
Off	No Link	Off	No Link
Amber	Half Duplex	Amber	10 Mbps
Green	Full Duplex	Green	100 Mbps



up after plugging in the network cable, and if the VendIT Reader is powered, there is no physical connection to another network enabled device. It is also important to note that the Right LED will remain solid on when

connected to a network, and the left LED will flash to indicate communication on the network.

If you are not getting any link lights when connecting the network cable, try checking that there is no physical damage to the cable itself and trace the wire back feeling the jacket of the cable to ensure there are no nicks, cuts or severe kinks in the cable. Also ensure that the cable is connected securely into the end users provided network jack.

## Check Network Programming in the Reader

The final thing you will want to ensure is that the reader is properly programmed to communicate with the VendIT server. In order to verify this information you will need to access 'Programming Mode' on the VendIT Reader. To enter 'Programming Mode' you will need access into the inside of the vending machine. Once you have the vending machine door open, on the back of the PIN Pad/Reader there is a square white button located on the bottom left corner while looking at the back of the PIN Pad/Reader. Press the button once and there should be an audible beep. Now if you look at the front of the PIN Pad/Reader the screen should read something like "Options Page 1". You are now ready to navigate the PIN Pad and modify programming values.

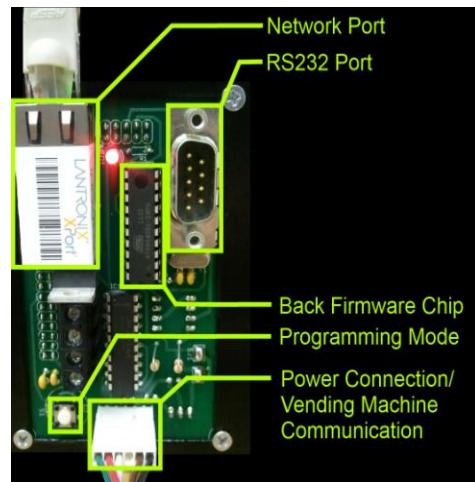
2 and 8 will navigate up and down the menu options  
4 and 6 will change the value

\* = Cancel / Go back to previous menu

# = Accept / Enter selected menu item

**NOTE:** To exit programming mode at any time press \*+\*+#

**NOTE:** In order for the Static IP programming options to be available for display DHCP needs to be set to "N" under IP Menu.



## Programming IP information

After pressing the square white 'Programming Mode' button on the back of the VendIT Reader, press the '8' key until you reach 'IP Menu' and press '#' to access the menu option.

When looking at the IP address information, on the bottom of the display screen on the Reader (pinpad) you will see one of three options. Server IP1:XXX / Static IP1:XXX / Gateway IP1:XXX. You may also notice that the IP address is divided into 4 sections 1.2.3.4 (xxx.xxx.xxx.xxx). Each section divided by decimals, corresponds to the IPX (Where X = 1,2,3,4 for what section of the IP address you are programming). If you want to adjust the value in each section you can use the following key combinations to modify the values.

**Example:** On the Server IP1:192 screen the top value shows 192.168.1.1 and needs to be changed to 208.54.108.89 (VendIT Server IP).

Step 1: Press 3+6+6+6+6+6 (Value should now be 208)  
Step 2: Press 0 to goto IP2:168  
Step 3: Press 7+7+1+4+4+4 (Value should now be 54)  
Step 4: Press 0 to goto IP3:1  
Step 5: Press 9+9+9+4+4+4 (Value should now be 108)  
Step 6: Press 0 to goto IP4:1  
Step 7: Press 9+9+1+4+4+4 (Value should now be 89)  
Step 8: Press # to Save  
Step 9: Press \* + \* + # to exit programming.

### Subnet Mask Programming:

The programming is different for subnet masks and only the 4 and 6 keys are used to cycle through possible subnet masks.

## Common Issues

Sometimes even after making sure everything is setup correctly the VendIT Reader will still be unable to communicate with the VendIT Server. The most common issue that affects the VendIT Reader is end user firewalls and white/black lists. Typically in these cases you will need to work with the end user IT department in order to ensure the reader has unrestricted access to the VendIT Server. You will usually need to provide the IT department with the MAC address of the VendIT Reader (Located on the network port on the reader), as well you may be asked to setup the reader on a static IP.

## Ping Test

The VendIT Reader comes with a built in test in order to determine if the Reader is capable of communication with the VendIT Server. In order to perform this test you will need to enter 'Programming Mode' by pressing the white square button on the rear of the Reader. Press '8' until you have scrolled to 'Technical Menu'. The first option should be to 'Press 0 to Read IP and Gateway', press '8' until you reach 'Press 0 to PING S207.54.108.89' then press '0'. After no more than 30 seconds the reader will respond with 'resp time <time>ms' or 'unreachable'. If you have checked everything else and all settings appear to be correct, you will need to get in touch with the end users IT department to determine if anything on the end user network is causing the reader to be blocked from communication with the VendIT Server.

## Reader Menu Items and Built-in Configuration Settings

When first entering the reader menu you must choose one of the three submenus in order to change the configuration. To scroll through the submenus you can use either the '2' key or the '8' key to scroll up and down respectively. To select a submenu you first scroll to the desired submenu and then hit the '#' key. The three submenus are Options Menu, Technical Menu, and IP menu. The Options Menu contains the most frequently changed configuration options. The Technical Menu contains network diagnostic tools along with settings that should rarely need to be changed. The IP Menu contains all the necessary network settings for configuring the device on your local area network. To change an actual configuration item that is non-numerical (changing from yes to no) you would use the '4' or '6' key.

### Options Page 1

- Send FF to start
- Show PIN Numbrs
- Show Balance
- Use PIN ONLY
- When PIN ONLY Length=
- Dispenser Number

### Options Page 2

- Allow MDB Disable
- Use Job Numbers
- 232 Card Reader
- Boot Time (scnds)

### Technical Menu

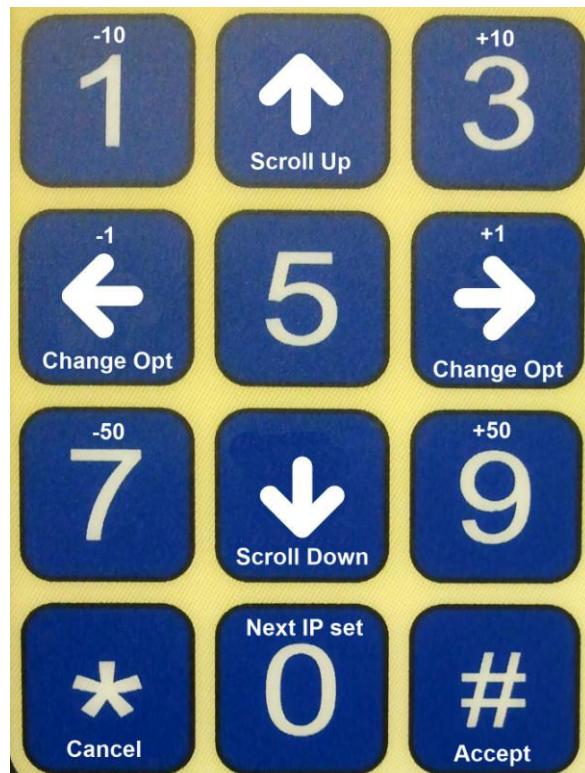
- Press 0 to Read IP and Gateway
- Press 0 to Read MAC Address
- Press 0 to Ping Server

### IP Menu

- Vendit Server IP
- Server Port
- Use DHCP
- \*\*Static IP
- \*\*Gateway
- \*\*Subnet Mask

### Exit

\*\* - These options are only available if 'Use DHCP' is set to 'N'



## • Options Menu Page 1:

### **Send FF to Start:**

On installations where the Vending Machine is setup to vend product for free to the end user this flag will always pass the maximum credit amount to the vending machine to simulate actual money. If your vending machine will charge end users any monetary value this option must be set to 'N'.

### **Show PIN numbers:**

When set to 'Yes' the reader will show the PIN as entered on the reader display. When set to 'No' the reader will show star characters on the display in place of the numbers entered, so that observers cannot see their PIN.

### **Show Balance:**

When set to 'Yes' the reader will show the customer's balance on the display. When set to 'No' the reader will display star characters instead of the actual balance. Each number in the balance will be replaced with a \*, so 1.00 would appear as \*.\*\* and 22.00 would appear as \*\*.\*\*. Even if this setting is 'No', when a transaction is completed, and the balance is below \$10.00, the balance will be displayed on the reader so that customers will see a low balance.

### **Use PIN Only:**

When this option is set to 'Y' the VendIT Reader will ignore all any media presented to the reader. This means that the user will be limited to authentication using only the numeric buttons on the Pin Pad on the VendIT Reader. It is important to note that if the end user wants to use E-Keys or any other type of media authentication provided through the RS232 port on the Reader, they will be unable to authenticate unless this option is set to 'N'

### **When PIN Only:**

When 'Use PIN Only' is set to 'Y', this option will allow an upper limit for length of the PIN. This value can be set so that end users may have a 1 to 8 digit PIN number.

### **Dispenser Number:**

This feature is currently reserved.

## • Options Page 2:

### **Allow MDB Disable:**

When this is set to 'Yes' the reader will allow the vending machine to disable it, and show 'Reader Disabled' on line 2 of the reader display until the vending machine re-enables it. The MDB protocol of the vending machine will disable the reader periodically under certain conditions. Caution, if this setting is set to No, it is possible for a customer to initiate a transaction with the server, and have the vending machine ignore the start session request. This will result in credit being displayed on the reader, but not on the vending machine, and the user will not be able to make a purchase. Simply hitting the '\*' key on the reader keypad will cancel this.

### **Use Job Numbers:**

The VendIT System allows the end user to track not only employee usage, but allows for the end user to attach Job Numbers to their transactions. By switching this option to 'Y' the reader will ask the end user to input a Job number after they authenticate on the VendIT Reader.

### **232 Card Reader:**

When set to 'Yes' the reader expects a compatible barcode or card reader to be attached. Set this to 'No' if there is no card reader connected to the vending reader.

### **Boot Time:**

Time in seconds (allowable time is 5-200 seconds) before trying to connect to the server on reader power-up. This is set to a delay that will allow the vending machine to complete its boot sequence. With extended boot times found in machines such as the StarFood vending machine, this at least gives an observer an idea of how long the power-up boot sequence will take to finish. Do not set this time higher than the actual boot time, as the reader may miss the enable command sent by the vending machine, and if the menu item 'Start Disabled' is set, the reader will remain disabled on boot.

- **Technical Menu:**

**Press 0 to Read IP and Gateway:**

This is a diagnostic tool that will display the reader's current IP address and the local area network's gateway IP address. Once the '0' key is pressed the display will show the reader's current IP address on the first line prefixed with an 'I' and the network gateway on the second line which is prefixed with a G.

**Press 0 to MAC Address:**

This is a diagnostic tool that will display the reader's media access control (MAC) address. Once the '0' key is pressed the display will show the reader's MAC address prefixed with MAC.

**Press 0 to PING:**

This tool is used for checking network connectivity between the reader and the server that it is supposed to be communicating with. The second line of the title should display the server IP address as set in the IP menu. When you press the '0' key the display will either give you the response time or tell you that the server is unreachable. If the server is unreachable you should check that your network settings are configured properly or talk to your local network administrator.

- **IP Menu:**

Please note the special key navigation instructions for changing the IP address. Server: This is the IP Address of the computer running the server software. Ask your local network administrator for this value. This is usually the static IP address of the computer server at your location. It is also possible to connect to a remote server over the Internet, however local network security may block this. In this case you will have to make arrangements with the IT personnel responsible for the location to allow the required port to be opened, and any firewalls to be configured. Note the unique way to cycle through the menu's IP settings. The '0' key will cycle through each segment of the IP address. The '1' key will decrement by 10, the '4' key will decrement by 1, and the '7' key will decrement by 50. The '3' key will increment by 10, the '6' key will increment by 1, and the '9' key will increment by 50. Use the '8' key to continue to the 'PORT' menu item.

**Server IP:**

The IP address of the VendIT Server or POS Server that the reader is communicating with and for a VendIT installation the Server IP should be 207.54.108.89.

**Server PORT:**

Number of the TCP port that the server software is listening to. Ask your local network administrator for the proper information to put here. The '1' key will decrement by 10, the '4' key will decrement by 1, and the '7' key will decrements by 50. Key 3 increments by 10, key 6 increments by 1, key 9 increments by 50. Use the 8 key to go to menu item 'PORT'.

**Use DHCP:**

When set to Yes the reader will use the available DHCP server on the network to obtain an IP address for its use. When set to No, the reader will have the static IP set in the next menu item and a subnet mask of 255.255.255.0

**Static:**

If DHCP above is set to No then the reader will use the static IP Address set in this menu item. Ask your local network administrator for a valid static IP for use. The subnet mask cannot be set. The subnet mask is 255.255.255.0 Contact us if that is a problem. Note the unique way to cycle through the menu's IP settings. The '0' key will cycle through each segment of the IP address. The '1' key will decrement by 10, the '4' key will decrement by 1, and the '7' key will decrement by 50. The '3' key will increment by 10, the '6' key will increment by 1, and the '9' key will increment by 50. Use the '8' key to continue to the next menu item.

**Gateway:**

If DHCP above is set to No then the reader will use the Gateway IP Address set in this menu item to connect through a gateway to the internet or another part of your network. Ask your local network administrator for the correct Gateway IP for use. Note the unique way to cycle through the menu's IP settings. The '0' key will cycle through each segment of the IP address. The '1' key will decrement by 10, the '4' key will decrement by 1, and the '7' key will decrement by 50. The '3' key will increment by 10, the '6' key will increment by 1, and the '9' key will increment by 50. Use the '8' key to continue to the next menu item. NOTE: if you change any IP settings, when you exit the menu, the reader will write the settings and reboot. Successful writing of the data is indicated by the message 'Saved OK' or a failed write as 'Save Settings Error'. If there is an error you will need to go into the IP menu again and make a change and exit again. The easiest way to do this is to go to the DHCP setting and cycle the Yes/No and set it again to what you need. This will flag the reader to save the IP changes on exit.

**• Exit**

Press the star key (\*) once or twice, depending on whether you are in a submenu or not, until you see 'Exit' on the display. You then press the '#' key to exit the menu and return to standby [ready] and save any changes you made above. Note: It is very important that you exit the menu when done to prevent unauthorized or inadvertent changing of the reader settings by customers.